

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,002	02/09/2001	Sergey L. Dickey		6429

7590 08/11/2004
Roberts Abokhair & Mardula, LLC
Suite 1000
11800 Sunrise Drive
Reston, VA 20191-5302

EXAMINER

MOORE, IAN N

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/781,002	Applicant(s) DICKY, SERGEY L.	
	Examiner Ian N Moore	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/24/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities: claim 2 recites, "...tester of claim1..." in line 2. It is suggested to insert a space between "claim" and "1". Appropriate correction is required.
2. Claims 3 and 13 are also objected for the reason as stated above.
3. Claim 7 is missing a period "." at the end in page 13, line 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gous'241 (U.S. 6,763,241), Snelling'131 (U.S. 6,418,131), Saints'972 (U.S. 6,097,972) and in view of well-established teaching in art.

Regarding claim 1, Gous'241 discloses a method for signal testing at other locations comprising:

receiving periodically a global reference time signal (see **FIG. 1, GPS SYNC data**) at a local transmitter (see **FIG. 2, a combined system of GPS Antenna 212 and GPS engine 210 of the mobile GPS transceiver unit 200**; see col. 5, lines 12-29) to periodically set an internal clock of the local transmitter (see **FIG. 5, steps 504, setting/calibrating**

mobile internet bit clock); see FIG. 5, steps 502-504; see col. 6, lines 40-55; note that upon receiving GPS signal, the mobile unit 200 calibrates its internal bit clock accordingly);

transmitting at least one signal from the local transmitter (see FIG. 2, communication section 204 and transceiver antenna 202; see FIG. 1, the mobile unit 106 communicates (i.e. transmit/receive signals) with base station 104 via a communication link 116; see col. 5, lines 1-25);

including time information and unique pattern in the at least one local transmitter signal (see col. 5, lines 1-12; see col. 6, lines 44-55; note that a mobile unit calibrates internal clock according to the GPS time and its exclusive/unique signal pattern, and the mobile unit communicates with the base station 104 using time slots, thus the communication must also include time information);

receiving at the signal tester (see FIG. 2, a combined system of communication section 204, Transceiver 202 and microprocessor 206 of the mobile unit 200) at least one signal (see FIG. 1, communication path 116) from a base station (see FIG. 1, GPS base station transceiver 104); see col. 5, lines 1-5, 12-25;

distinguishing at the signal tester the at least one base station signal from the global reference signal, wherein the signal containing the unique pattern is identified as the global reference signal (see FIG. 2, Microprocessor 206 and support logic; see col.5, lines 18-27, see col. 6, lines 40-55; note that the mobile unit (i.e. microprocessor and support logic) is connected to both communication section interface 202 and GPS interface 212. Thus,

the mobile unit has a capability to identify the SYNC signal from GPS and signal from base station 104).

Gous'241 does not explicitly disclose the CDMA signal (see Snelling'131 col. 6, lines 10-18; CDMA system) at indoor and other locations where a time synchronization signal is obstructed (see FIG. 1, Residential unit 10) from a signal tester (see FIG. 1, handsets 301, 303, 304 units which connect to their corresponding wireless access units WAU 200; note that the handsets units are within the residential unit, thus, the time synchronizations signal is hinder from them) comprising;

receiving the at least one local CDMA transmitter signal (see FIG. 1, a signal produced by NCU, Network Control Unit 100; see FIG. 3A, RME signals) containing the information at a signal tester (see FIG. 1, handsets 301, 303, 304 units) that is otherwise obstructed from receiving a reference time signal (note that the handsets units and their WAU units are within the residential unit, thus, the time synchronizations signal from public network is hinder from them; see col. 9, lines 60 to see col. 10, lines 7;

distinguishing at the signal tester the at least one local CDMA transmitter signal, wherein the signal containing the unique pattern is identified as the at least one local transmitter signal (see col. 11, lines 35-65; col. 12, lines 30-67; see col. 14, lines 1-52; note that the WAU and handsets unit has the capability to identify the NCU unit from unique RME signals);

However, the above-mentioned claimed limitations are taught by Snelling'131. In view of this, having the system of Gous'241 and then given the teaching of Snelling'131, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to modify the system of Gous'241, by providing a residential communication where a handset units are within the residential area and communicates to public network via NCU, as taught by Snelling'131. The motivation to combine is to obtain the advantages/benefits taught by Snelling'131 since Snelling'131 states at col. 2, lines 10 to col. 3, line 55 that it would provide flexible, modular system which provides business and residential wireless connectivity between the PSTN and computers, handsets, and eliminate the need to rewire business and residents in order to accommodate new services. The motivation being that by utilizing home wireless system, it would increase the both resident and business customer satisfaction since the it would provide RF based connectivity to any number of lines and any number of existing and future electronic devices, in a modular and flexible manner.

Neither Gous'241 nor Snelling'131 explicitly discloses measuring at the signal tester (see **Saints'972 FIG. 1, CDMA mobile telephone 12**) the at least one CDMA base station signal (see **Saints'972 FIG. 1, Base Stations 14 and their pn control signals 16 are searched and measured by mobile telephone; see col. 15, lines 16-65**); and

evaluating at the signal tester the at least one CDMA base station signal for signal propagation and coverage (see **FIG. 1, Switch A 36, Switch B 40, and logic combiner 42 determine the power control output such as power up, down or off due to signal propagation delay and the power with respect to the signal coverage; see col. 7, line 1-26**).

However, the above-mentioned claimed limitations are taught by Saints'972. In view of this, having the combined system of Gous'241 and Snelling'131, then given the teaching of Saints'972, it would have been obvious to one having ordinary skill in the art at the time the

invention was made to modify the combined system of Gous'241 and Snelling'131, for the purpose of providing measuring the pn power control signal at the CDMA mobile telephone and evaluate the signal power with respect to delay and coverage, as taught by Saints'972, since Saints'972 states the advantages/benefits at col. 3, lines 65 to col. 5 lines 25 that it would provide a system for controlling the transmit power of a mobile telephone. The motivation being that by controlling the transmit power based upon searched and measured power control bit, it can enhance the mobile telephone that is easy to use and cost-effective to manufacture and implement.

Neither Gous'241, Snelling'131, nor Saints'972 explicitly discloses marking the at least one local transmitter signal with a unique pattern;

setting an internal clock within the signal tester based on the time information included in the at least one local CDMA transmitter signal.

However, the above-mentioned claimed limitations are taught by well-established teaching in art. In particular, well established teaching in art teaches marking the at least one local transmitter signal with a unique pattern. In outdoor scenario, Gous'241 teaches the base station which commutes with a mobile units. It is well known in the art, when the base station transmits messages to each mobile unit, it must use a pilot signal, which contains a unique identification of each mobile unit. In indoor scenario, Snelling'131 teaches NCU base unit which communicates between the public network and the plurality of handsets and their associated WAU. Thus, it is also well known in the art, when the indoor base station (i.e. NCU) must also address each handset with a unique signal, which contains a unique identification/pattern of each mobile unit. Well established teaching in art teaches setting an

Art Unit: 2661

internal clock within the signal tester based on the time information included in the at least one local CDMA transmitter signal. Gous'241 teaches the mobile unit synchronizing the timing from the GPS. Snelling'131 teaches a handset unit communication the outside public network (i.e. GPS) via NCU. Thus, Gous'241 mobile unit can be used in residential area, but it must rely on gateway base unit (i.e. NCU), which interfaces the public network, in order to set its internal clock according the reference synchronization signal transmitted by the gateway base unit.

In view of this, having the combined system of Gous'241, Snelling'131 and Saints'972, then given the teaching of well established teaching in art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241, Snelling'131 and Saints'972, for the purpose of sending a unique identifiable signal and adjusting the local clock based upon a reference signal, as taught by well established teaching in art. The motivation being that by sending a unique identifiable signal to each mobile station, it will be easier to identify each mobile station at both transmitting and receiving ends. The motivation being that by synchronizing local clock according to the reference clock, it will be reduce the synchronization failure such as delay and slips due to the timing jitter.

Regarding claim 2, the combined system of Gous'241, Snelling'131 and Saints'972 discloses receiving at the signal tester at least one signal from a CDMA base station; measuring the at least one CDMA base station signal from CDMA base station; and

Art Unit: 2661

evaluating the at least one CDMA base station signal for signal propagation and coverage form the of CDMA base station as described above in claim 1.

Saints'972 further discloses a plurality of base stations (see **FIG. 1, Base Station A 14A and base station B 14B; see col. 6, lines 15-34**).

However, the above-mentioned claimed limitations are taught by Saints'972. In view of this, having the combined system of Gous'241 and Snelling'131, then given the teaching of Saints'972, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241 and Snelling'131 as taught by Saints'972, for the same purpose and motivation as described above in claim 1.

Regarding claim 11, Gous'241 discloses a method for signal testing at other locations comprising:

receiving periodically a global reference time signal (see **FIG. 1, GPS SYNC data**) at a local transmitter (see **FIG. 2, a combined system of GPS Antenna 212 and GPS engine 210 of the mobile GPS transceiver unit 200; see col. 5, lines 12-29**) to periodically set an internal clock of the local transmitter (see **FIG. 5, steps 504, setting/calibrating mobile internet bit clock**); see **FIG. 5, steps 502-504; see col. 6, lines 40-55; note that upon receiving GPS signal, the mobile unit 200 calibrates its internal bit clock accordingly**);

transmitting at least one signal from the local transmitter (see **FIG. 2, communication section 204 and transceiver antenna 202; see FIG. 1, the mobile unit 106**

communicates (i.e. transmit/receive signals) with base station 104 via a communication link 116; see col. 5, lines 1-25);

including time information and unique pattern in the at least one local transmitter signal (see col. 5, lines 1-12; see col. 6, lines 44-55; note that a mobile unit calibrates internal clock according to the GPS time and its exclusive/unique signal pattern, and the mobile unit communicates with the base station 104 using time slots, thus the communication must also include time information);

receiving at the signal tester (see FIG. 2, a combined system of communication section 204, Transceiver 202 and microprocessor 206 of the mobile unit 200) at least one signal (see FIG. 1, communication path 116) from a base station (see FIG. 1, GPS base station transceiver 104); see col. 5, lines 1-5, 12-25;

distinguishing at the signal tester the at least one base station signal from the global reference signal, wherein the signal containing the unique pattern is identified as the global reference signal (see FIG. 2, Microprocessor 206 and support logic; see col.5, lines 18-27, see col. 6, lines 40-55; note that the mobile unit (i.e. microprocessor and support logic) is connected to both communication section interface 202 and GPS interface 212. Thus, the mobile unit has a capability to identify the SYNC signal from GPS and signal from base station 104);

compensating for a signal pattern drift detected (see FIG. 13, step 1302, 1304, and 1306, detect difference in clocks and see FIG. 14, steps 1406) by adjusting a timing generator to modify the internal clock (see FIG. 13, step 1308 and see FIG. 14, step 1408; see col. 8, lines 30-55).

Gous'241 does not explicitly disclose the CDMA signal (see **Snelling'131 col. 6, lines 10-18; CDMA system**) at indoor and other locations where a time synchronization signal is obstructed (see **FIG. 1, Residential unit 10**) from a signal tester (see **FIG. 1, handsets 301, 303, 304 units which connect to their corresponding wireless access units WAU 200; note that the handsets units are within the residential unit, thus, the time synchronizations signal is hinder from them**) comprising;

receiving the at least one local CDMA transmitter signal (see **FIG. 1, a signal produced by NCU, Network Control Unit 100; see FIG. 3A, RME signals**) containing the information at a signal tester (see **FIG. 1, handsets 301, 303, 304 units**) that is otherwise obstructed from receiving a reference time signal (**note that the handsets units and their WAU units are within the residential unit, thus, the time synchronizations signal from public network is hinder from them; see col. 9, lines 60 to see col. 10, lines 7;**

distinguishing at the signal tester the at least one local CDMA transmitter signal, wherein the signal containing the unique pattern is identified as the at least one local transmitter signal (see **col. 11, lines 35-65; col. 12, lines 30-67; see col. 14, lines 1-52; note that the WAU and handsets unit has the capability to identify the NCU unit from unique RME signals**);

However, the above-mentioned claimed limitations are taught by Snelling'131. In view of this, having the system of Gous'241 and then given the teaching of Snelling'131, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Gous'241, by providing a residential communication where a handset units are within the residential area and communicates to public network via NCU,

as taught by Snelling'131. The motivation to combine is to obtain the advantages/benefits taught by Snelling'131 since Snelling'131 states at col. 2, lines 10 to col. 3, line 55 that it would provide flexible, modular system which provides business and residential wireless connectivity between the PSTN and computers, handsets, and eliminate the need to rewire business and residents in order to accommodate new services. The motivation being that by utilizing home wireless system, it would increase the both resident and business customer satisfaction since the it would provide RF based connectivity to any number of lines and any number of existing and future electronic devices, in a modular and flexible manner.

Neither Gous'241 nor Snelling'131 explicitly discloses CDMA pilot transmitter (see **FIG. 1, Base station with W/PN 14 or PN GEN 48**), a pilot channel (see **FIG. 2, PC BIT SW 60; a channel that power control bits, P.C. BITS resides**), a pilot signal (see **FIG. 2, the output of PC BIT SW. 60**), psuedonoise scanner (see **FIG. 1, PN Searcher 26 and 27**); see col. 8, lines 11 to col. 9, lines 7;

measuring at the signal tester (see **Saints'972 FIG. 1, CDMA mobile telephone 12**) the at least one CDMA base station signal (see **Saints'972 FIG. 1, Base Stations 14 and their pn control signals 16 are searched and measured by mobile telephone**; see col. 15, lines 16-65); and

evaluating at the signal tester the at least one CDMA base station signal for signal propagation and coverage (see **FIG. 1, Switch A 36, Switch B 40, and logic combiner 42 determine the power control output such as power up, down or off due to signal propagation delay and the power with respect to the signal coverage**; see col. 7, line 1-26).

However, the above-mentioned claimed limitations are taught by Saints'972. In view of this, having the combined system of Gous'241 and Snelling'131, then given the teaching of Saints'972, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241 and Snelling'131, for the purpose of providing measuring the pn power control signal at the CDMA mobile telephone and evaluate the signal power with respect to delay and coverage, as taught by Saints'972, since Saints'972 states the advantages/benefits at col. 3, lines 65 to col. 5 lines 25 that it would provide a system for controlling the transmit power of a mobile telephone. The motivation being that by controlling the transmit power based upon searched and measured power control bit, it can enhance the mobile telephone that is easy to use and cost-effective to manufacture and implement.

Neither Gous'241, Snelling'131, nor Saints'972 explicitly discloses marking the at least one local transmitter signal with a unique pattern;

setting an internal clock within the signal tester based on the time information included in the at least one local CDMA transmitter signal;

compensating for a local CDMA pilot transmission signal pattern at the signal tester by adjusting a timing generator of the signal tester;

However, the above-mentioned claimed limitations are taught by well-established teaching in art. In particular, well established teaching in art teaches marking the at least one local transmitter signal with a unique pattern. In outdoor scenario, Gous'241 teaches the base station which commutes with a mobile units. It is well known in the art, when the base station transmits messages to each mobile unit, it must use a pilot signal, which contains a

unique identification of each mobile unit. In indoor scenario, Snelling'131 teaches NCU base unit which communicates between the public network and the plurality of handsets and their associated WAU. Thus, it is also well known in the art, when the indoor base station (i.e. NCU) must also address each handset with a unique signal, which contains a unique identification/pattern of each mobile unit. Well established teaching in art teaches setting an internal clock within the signal tester based on the time information included in the at least one local CDMA transmitter signal. Gous'241 teaches the mobile unit synchronizing the timing from the GPS. Snelling'131 teaches a handset unit communication the outside public network (i.e. GPS) via NCU. Thus, Gous'241 mobile unit can be used in residential area, but it must rely on gateway base unit (i.e. NCU), which interfaces the public network, in order to set its internal clock according the reference synchronization signal transmitted by the gateway base unit. Well established teaching in art also discloses compensating for a local CDMA pilot transmission signal pattern drift detected at the signal tester by adjusting a timing generator of the signal tester to modify the signal tester internal clock. Gous'241 teaches adjusting the internal clock based upon GPS clock in FIG. 10-13. Note that in order to adjust the internal clock, the slip must be detected and the internal time generator must be modified/adjusted.

In view of this, having the combined system of Gous'241, Snelling'131 and Saints'972, then given the teaching of well established teaching in art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241, Snelling'131 and Saints'972, for the purpose of sending a unique identifiable signal and adjusting the local clock based upon a reference signal, as

Art Unit: 2661

taught by well established teaching in art. The motivation being that by sending a unique identifiable signal to each mobile station, it will be easier to identify each mobile station at both transmitting and receiving ends. The motivation being that by synchronizing local clock according to the reference clock, it will be reduce the synchronization failure such as delay and slips due to the timing jitter.

Regarding claims 12 and 22, Gous'241 discloses an apparatus for signal testing comprising:

a local reference transmitter (see **FIG. 2, a combined system of GPS Antenna 212 and GPS engine 210 of the mobile GPS transceiver unit 200**; see col. 5, lines 12-29) comprising:

a reference internal clock for maintaining time information (see **FIG. 5, steps 504, mobile internal bit clock for maintaining the GPS SYNC signal information, also see FIG. 1**);

a receiver (see **FIG. 2, GPS antenna 212**) for periodically receiving a global reference time signal (see **FIG. 1, GPS SYNC data is received at a receiver 212**);

a processor for setting the reference internal clock (see **FIG. 2, Microprocessor 206 and support logic sets the internal clock**; see **FIG. 5, steps 504, setting/calibrating mobile internal bit clock**; see **FIG. 5, steps 502-504**; see col. 6, lines 40-55; note that upon receiving GPS signal, the mobile unit 200 calibrates its internal bit clock accordingly;

a transmitter for transmitting a signal (see FIG. 2, communication section 204 and transceiver antenna 202; see FIG. 1, the mobile unit 106 communicates (i.e. transmit/receive signals) with base station 104 via a communication link 116; see col. 5, lines 1-25), the signal comprising the unique pattern and time information (see col. 5, lines 1-12; see col. 6, lines 44-55; note that a mobile unit calibrates internal clock according to the GPS time and its exclusive/unique signal pattern, and the mobile unit communicates with the base station 104 using time slots, thus the communication must also include time information) and

a testing device (see FIG. 2, a combined system of communication section 204, Transceiver 202 and microprocessor 206 of the mobile unit 200) comprising:

a receiver (see FIG. 2, communication section 204 and transceiver antenna 202) and for receiving a signal from a base station (see FIG. 1, the mobile unit 106 communicates (i.e. transmit/receive signals) with base station 104 via a communication link 116; see col. 5, lines 1-25).

Gous'241 does not explicitly disclose the CDMA signal (see Snelling'131 col. 6, lines 10-18; CDMA system) at indoor and other locations where a time synchronization signal is obstructed (see FIG. 1, Residential unit 10) from a signal tester (see FIG. 1, handsets 301, 303, 304 units which connect to their corresponding wireless access units WAU 200; note that the handsets units are within the residential unit, thus, the time synchronizations signal is hinder from them) comprising;

a receiver (see FIG. 8, A25 Radio Transceiver which connects to antenna of the WAU which couple to handset) for receiving the at least one local CDMA transmitter

Art Unit: 2661

signal (see **FIG. 1**, a signal produced by NCU, Network Control Unit 100; see **FIG. 3A**, **RME signals**); see col. 9, lines 60 to see col. 10, lines 7;

a processor (see **FIG. 8**, microprocessor ASIC A23 and details circuit at **FIG. 9**) for distinguishing at the signal tester the at least one local CDMA transmitter signal (see col. 11, lines 35-65; col. 12, lines 30-67; see col. 14, lines 1-52; note that the WAU and handsets unit has the capability to identify the NCU unit from unique RME signals);

However, the above-mentioned claimed limitations are taught by Snelling'131. In view of this, having the system of Gous'241 and then given the teaching of Snelling'131, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Gous'241, by providing a residential communication where a handset units are within the residential area and communicates to public network via NCU, as taught by Snelling'131. The motivation to combine is to obtain the advantages/benefits taught by Snelling'131 since Snelling'131 states at col. 2, lines 10 to col. 3, line 55 that it would provide flexible, modular system which provides business and residential wireless connectivity between the PSTN and computers, handsets, and eliminate the need to rewire business and residents in order to accommodate new services. The motivation being that by utilizing home wireless system, it would increase the both resident and business customer satisfaction since the it would provide RF based connectivity to any number of lines and any number of existing and future electronic devices, in a modular and flexible manner.

Neither Gous'241 nor Snelling'131 explicitly discloses a processor (see **Saints'972 FIG. 1**, searcher 26-27, power control combiner 28 and microprocessor 34) measuring at the signal tester (see **Saints'972 FIG. 1**, CDMA mobile telephone 12) the at least one

Art Unit: 2661

CDMA base station signal (see **Saints'972 FIG. 1, Base Stations 14 and their pn control signals 16 are searched and measured by mobile telephone; see col. 15, lines 16-65**); and evaluating at the signal tester the at least one CDMA base station signal for signal propagation and coverage (see **FIG. 1, Switch A 36, Switch B 40, and logic combiner 42 determine the power control output such as power up, down or off due to signal propagation delay and the power with respect to the signal coverage; see col. 7, line 1-26**), and

CDMA pilot transmitter (see **FIG. 1, Base station with W/PN 14 or PN GEN 48**), a pilot channel (see **FIG. 2, PC BIT SW 60; a channel that power control bits, P.C. BITS resides**), a pilot signal (see **FIG. 2, the output of PC BIT SW. 60**), psuedonoise scanner (see **FIG. 1, PN Searcher 26 and 27**); see col. 8, lines 11 to col. 9, lines 7.

However, the above-mentioned claimed limitations are taught by **Saints'972**. In view of this, having the combined system of **Gous'241** and **Snelling'131**, then given the teaching of **Saints'972**, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of **Gous'241** and **Snelling'131**, for the purpose of providing measuring the pn power control signal at the CDMA mobile telephone and evaluate the signal power with respect to delay and coverage, as taught by **Saints'972**, since **Saints'972** states the advantages/benefits at col. 3, lines 65 to col. 5 lines 25 that it would provide a system for controlling the transmit power of a mobile telephone. The motivation being that by controlling the transmit power based upon searched and measured power control bit, it can enhance the mobile telephone that is easy to use and cost-effective to manufacture and implement.

Art Unit: 2661

Neither Gous'241, Snelling'131, nor Saints'972 explicitly discloses a unique signal pattern for marking a signal;

a tester internal clock for maintaining time information;

a processor for setting the tester internal clock;

However, the above-mentioned claimed limitations are taught by well-established teaching in art. In particular, well-established teaching in art teaches a unique signal pattern for marking a signal. In outdoor scenario, Gous'241 teaches the base station which commutes with a mobile units. It is well known in the art, when the base station transmits messages to each mobile unit, it must use a pilot signal, which contains a unique identification of each mobile unit. In indoor scenario, Snelling'131 teaches NCU base unit which communicates between the public network and the plurality of handsets and their associated WAU. Thus, it is also well known in the art, when the indoor base station (i.e. NCU) must also address each handset with a unique signal, which contains a unique identification/pattern of each mobile unit. Well-established teaching in art teaches a tester internal clock for maintaining time information; a processor for setting the tester internal clock. Gous'241 teaches the mobile unit synchronizing the timing from the GPS. Snelling'131 teaches a handset unit communication the outside public network (i.e. GPS) via NCU. Thus, Gous'241 mobile unit can be used in residential area, but it must rely on gateway base unit (i.e. NCU), which interfaces the public network, in order to set its internal clock according the reference synchronization signal transmitted by the gateway base unit.

In view of this, having the combined system of Gous'241, Snelling'131 and Saints'972, then given the teaching of well established teaching in art, it would have been

Art Unit: 2661

obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241, Snelling'131 and Saints'972, for the purpose of sending a unique identifiable signal and adjusting the local clock based upon a reference signal, as taught by well established teaching in art. The motivation being that by sending a unique identifiable signal to each mobile station, it will be easier to identify each mobile station at both transmitting and receiving ends. The motivation being that by synchronizing local clock according to the reference clock, it will be reduce the synchronization failure such as delay and slips due to the timing jitter.

Regarding claims 3 and 13, Saints'972 discloses transmitting a pilot signal (see FIG. 2, the output of PC BIT SW. 60; see col. 8, lines 11 to col. 9, lines 7).

However, the above-mentioned claimed limitations are taught by Saints'972. In view of this, having the combined system of Gous'241 and Snelling'131, then given the teaching of Saints'972, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241 and Snelling'131 as taught by Saints'972, for the same purpose and motivation as described above in claims 1 and 12.

Regarding claims 4 and 14, Saints'972 discloses transmitting simultaneously pseudorandom pilot signals as described above in claims 3 and 13. Gous'241 teaches transmitting simultaneously a unique pattern signal as described above in claims 1 and 12. Thus, the combined system teaches transmitting simultaneously a unique pattern pilot signal. It is well known in the art that in order to create a pseudorandom pilot signal unique, one

Art Unit: 2661

must create a signal different from pseudorandom format, that is, non- pseudorandom signal. When creating non- pseudorandom, one must closely position a plurality of pilot signals for a recognizable marker.

In view of this, having the combined system of Gous'241, Snelling'131 and Saints'972, then given the teaching of well established teaching in art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241, Snelling'131 and Saints'972, as taught by well established teaching in art, for the same purpose as described above in claim 1 and 12.

Regarding claims 5, 8, 15 and 18, Gous'241 discloses wherein the receiver comprises a GPS receiver (see **FIG. 2**, see **FIG. 2**, **GPS engine 210**) for periodically receiving a GPS synchronized time signal for synchronizing time (see **FIG. 1**, **receiving GPS SYNC data 110**); and wherein the reference internal clock comprises a GPS clock (see **FIG. 2**, **GPS engine 210**) for maintaining the GPS synchronized time (see **FIG. Support logic and microprocessor 206**; note that GPS time is maintained in the GPS engine by the GPS logic and microprocessor; see col. 5, lines 12-27; see col. 6, lines 40-55).

Regarding claims 6 and 16, Saints'972 discloses a psuedonoise scanner for scanning for psuedonoise (see **FIG. 1**, **PN Searcher 26 and 27 for searching pn signals**); see col. 8, lines 11 to col. 9, lines 7).

However, the above-mentioned claimed limitations are taught by Saints'972. In view of this, having the combined system of Gous'241 and Snelling'131, then given the teaching of

Art Unit: 2661

Saints'972, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241 and Snelling'131 as taught by Saints'972, for the same purpose and motivation as described above in claims 1 and 12.

Regarding claim 7, Gous'241 discloses a pilot transmitter with an internal clock (see **FIG. 2, a combined system of GPS Antenna 212 and GPS engine 210 of the mobile GPS transceiver unit 200; see col. 5, lines 12-29 with an internal BIT clock**) and a receiver (see **FIG. 2, GPS antenna 212**) for periodically receiving a global reference time signal (see **FIG. 1, GPS SYNC data is received at a receiver 212**).

Saints'972 discloses wherein the psuedonoise scanner is a pilot channel scanner (see **FIG. 1, PN Searcher 26 and 27 for searching pn signals; see col. 8, lines 11 to col. 9, lines 7**).

However, the above-mentioned claimed limitations are taught by Saints'972. In view of this, having the combined system of Gous'241 and Snelling'131, then given the teaching of Saints'972, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241 and Snelling'131 as taught by Saints'972, for the same purpose and motivation as described above in claims 1 and 12.

Regarding claim 9, Saints'972 teaches discloses measuring at the signal tester as described above in claim 1. Furthermore, Gous'241 discloses measuring a relative displacement of the pattern of the signal from successive scanner scans of the signal (see

Art Unit: 2661

FIG. 13, step 1302, 1304, detect leading edge of the clock, and see FIG. 14, steps 1402 and 1404;

processing the measured displacement of the pattern (see FIG. 13, step 1306, detect difference between measured clocks; and see FIG. 14, steps 1406);

and adjusting a timing of the scanner to compensate for drift in the measured pattern (see FIG. 13, step 1308 and see FIG. 14, step 1408; the timing or lock clock is adjusted in order to correct error skew; see col. 8, lines 30-55).

Well-established teaching in art teaches a timing generator as described above in claim 1.

In view of this, having the combined system of Gous'241, Snelling'131 and Saints'972, then given the teaching of well established teaching in art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241, Snelling'131 and Saints'972, as taught by well established teaching in art, for the same purpose and motivation as described above.

Regarding claim 17, Gous'241 teaches a transmitter for transmitting a channel signal as described above in claim 12 and 16. Saints'972 discloses transmitting and receiving a pilot channel (see FIG. 2, PC BIT SW 60; a channel that power control bits, P.C. BITS resides), and a scanner for scanning a pilot channel (see FIG. 1, PN Searcher 26 and 27 for searching pn signals); see col. 8, lines 11 to col. 9, lines 7).

However, the above-mentioned claimed limitations are taught by Saints'972. In view of this, having the combined system of Gous'241 and Snelling'131, then given the teaching of

Art Unit: 2661

Saints'972, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241 and Snelling'131 as taught by Saints'972, for the same purpose and motivation as described above in claims 1 and 12.

Regarding claim 19, the combined system of Gous'241, Snelling'131 and Saints'972 discloses the CDMA system transmitter and the CDMA testing device as described above in claim 12. Gous'241 teaches logic for measuring relative displacement of the reference transmitter unique signal pattern from successive scanner scans of the reference transmitter signal (see **FIG. 13, step 1302, 1304, detect leading edge of the clock, and see FIG. 14, steps 1402 and 1404**);

and logic for processing the relative displacement of successive measurements of the reference transmitter unique signal pattern (see **FIG. 13, step 1306, detect difference between measured clocks; and see FIG. 14, steps 1406**) and a means for adjusting the tester internal clock further comprising: adjusting the signal tester internal clock; and adjusting the timing to compensate for drift in the reference transmitter pattern (see **FIG. 13, step 1308 and see FIG. 14, step 1408; see col. 8, lines 30-55; the timing or lock clock is adjusted in order to correct error skew; see col. 8, lines 30-55**).

Saints'972 discloses CDMA pilot transmitter (see **FIG. 1, Base station with W/PN 14 or PN GEN 48**), a pilot channel (see **FIG. 2, PC BIT SW 60; a channel that power control bits, P.C. BITS resides**), a pilot signal (see **FIG. 2, the output of PC BIT SW. 60**), pseudonoise scanner (see **FIG. 1, PN Searcher 26 and 27**); see col. 8, lines 11 to col. 9, lines 7.

Well established teaching in art also discloses compensating for a local CDMA pilot transmission signal pattern drift detected at the signal tester by adjusting a timing generator and timing generator adjuster of the signal tester to modify the signal tester internal clock. Gous'241 teaches adjusting the internal clock based upon GPS clock in FIG. 10-13. Note that in order to adjust the internal clock, the slip must be detected and the internal time generator and adjustor must be modified/adjusted.

In view of this, having the combined system of Gous'241, Snelling'131 and Saints'972, then given the teaching of well established teaching in art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241, Snelling'131 and Saints'972, as taught by well established teaching in art, for the same purpose as described above in claim 12.

Regarding claim 20, the combined system of Gous'24, Snelling'131 and Saints'972 discloses the timing generator adjustor and adjusting a timing generator to compensate for a detected timing drift as described above in claim 19. It is well known in the art that synchronizer or delay adjustor must comprise a delay lock loop.

In view of this, having the combined system of Gous'241, Snelling'131 and Saints'972, then given the teaching of well established teaching in art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241, Snelling'131 and Saints'972, as taught by well established teaching in art, for the same purpose as described above in claim 12.

Regarding claim 10 and 21, the combined system of Gous'24, Snelling'131 and Saints'972 discloses the timing generator adjustor and adjusting a timing generator to compensate for a detected timing drift as described above in claim 19. It is well known in the art that delay lock loop must modify a voltage controlled clock oscillator, a digital to analog converter and an imbedded processor in order to adjust the timing.

In view of this, having the combined system of Gous'241, Snelling'131 and Saints'972, then given the teaching of well established teaching in art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Gous'241, Snelling'131 and Saints'972, as taught by well established teaching in art, for the same purpose as described above in claim 12.

Art Unit: 2661

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N Moore whose telephone number is 703-605-1531. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 703-308-7828. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
8/6/04



KENNETH VANDERPUYE
PRIMARY EXAMINER